

Application No.: 10/823,482
Amendment dated: May 9, 2005
Reply to Office Action of February 23, 2005
Attorney Docket No.: 2802-159-036

This listing of the claims will replace all prior versions, and listings, of claims in the patent application.

Listing of Claims:

Please Cancel Claims 1-3

1 4. (Original) A permanently attached hose coupling, for a pressurized conduit end,
2 having a generally tubular nipple and a generally cylindrical shell permanently attached
3 to said nipple and generally surrounding said conduit end, said nipple having a
4 longitudinal axis, a first end, a second end, a plurality of circumferential grooves located
5 between said first and said second ends, a bore extending from said first end to said
6 second end, and an insert portion adjacent said plurality of grooves inserted into said
7 conduit end;

8 wherein said grooves are dimensioned for affixedly receiving at least one
9 of an inside surface, an end surface and an outside surface of said generally cylindrical
10 shell; and

11 said grooves comprising:

12 a first groove with a generally flat base portion parallel with said
13 longitudinal axis, a first substantially vertically oriented side wall, and a second
14 substantially vertically oriented side wall having a maximum radial extent less than said
15 first side wall; a second groove adjacent said first groove, with a generally flat base
16 portion parallel with said longitudinal axis having a diameter less than said first groove
17 base portion, a first substantially vertically oriented side wall having a maximum radial
18 extent similar to said first groove second side wall, and a second substantially vertically
19 oriented side wall having a maximum radial extent less than said second groove first side
20 wall; and

21 a third groove adjacent said second groove, with a generally flat base
22 portion parallel with said longitudinal axis having a diameter less than said second
23 groove base portion, a first substantially vertically oriented side wall having a maximum

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24 radial extent similar to said second groove second side wall and a second substantially
25 vertically oriented side wall having a maximum radial extent greater than said third
26 groove first side wall.

1 5. (Original) The hose coupling as in claim 4 wherein said first groove second side
2 wall and said second groove second side wall have a contoured top portion.

1 6. (Original) The hose coupling as in claim 4 wherein said first groove second side
2 wall and said second groove second side wall have an angled top portion.

1 7. (Original) The hose coupling as in claim 4 wherein said insert portion has a
2 plurality of spaced, circumferentially extending, frusto-conically shaped protrusions on
3 the outer surface thereof.

1 8. (Original) The hose coupling as in claim 7 wherein one of said plurality of
2 spaced protrusions is positioned approximately equidistant between said third groove and
3 said second end and has a maximum radial extent greater than that of each of the others
4 of said plurality of protrusions.

1 9. (Original) The hose coupling as in claim 4 wherein said generally flat base
2 portion of each of said plurality of circumferential grooves has a series of surface
3 disruptions along its circumference.

1 10. (Original) The hose coupling as in claim 4 wherein the outer surface of said third
2 groove second substantially vertically oriented side wall has threads for attachment with
3 said generally cylindrical shell.

1 11. (Original) A permanently attached hose coupling, for a pressurized conduit end,
2 having a generally tubular nipple and a generally cylindrical shell permanently attached

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3 to said nipple and generally surrounding said conduit end, said nipple having a
4 longitudinal axis, a first end, a second end, a plurality of circumferential grooves located
5 between said first and said second ends, a bore extending from said first end to said
6 second end, and an insert portion adjacent said plurality of grooves inserted into said
7 conduit end;

8 wherein said grooves are dimensioned for affixedly receiving at least one
9 of an inside surface, an end surface and an outside surface of said generally cylindrical
10 shell; and

11 said grooves comprising:

12 a first groove with a generally flat base portion parallel with said longitudinal axis, a first
13 substantially vertically oriented side wall, and a second substantially vertically oriented
14 side wall having a maximum radial extent less than said first side wall; and

15 second groove adjacent said first groove, with a generally flat base
16 portion parallel with said longitudinal axis having a diameter less than said first groove
17 base portion, a first substantially vertically oriented side wall having a maximum radial
18 extent similar to said first groove second side wall, and a second substantially vertically
19 oriented side wall having a maximum radial extent greater than said second groove first
20 side wall.

1 12. (Original) The hose coupling as in claim 11 wherein said insert portion has a
2 plurality of spaced, circumferentially extending, frusto-conically shaped protrusions on
3 the outer surface thereof.

1 13. (Original) The hose coupling as in claim 12 wherein one of said plurality of
2 spaced protrusions is positioned approximately equidistant between said second groove
3 and said second end and has a maximum radial extent greater than that of each of the
4 others of said plurality of protrusions.

1 14. (Original) The hose coupling as in claim 11 wherein said generally cylindrical

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2 shell has a first end with an inwardly directed portion having an annular surface in an
3 abutting relationship with one of said plurality of circumferential grooves for said
4 permanent attachment.

1 15. (Original) The hose coupling as in claim 14 wherein said inwardly directed
2 portion is located at the longitudinal inner end of said generally cylindrical shell.

1 16. (Original) The hose coupling as in claim 14 wherein said inwardly directed
2 portion is located on the inside surface of said generally cylindrical shell.

1 17. (Original) The hose coupling as in claim 11 wherein said generally cylindrical
2 shell has a first end and a second end, said first end having a turned-in portion generally
3 directed towards said second end.

1 18. (Original) The hose coupling as in claim 17 wherein the outer surface of said
2 turned-in portion is in affixed abutment with said second groove first side wall.

1 19. (Original) The hose coupling as in claim 11 wherein the inside surface of said
2 generally cylindrical shell affixedly abuts said first and said second side walls of said
3 second groove.

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1 27. (Original) A generally tubular nipple having a longitudinal axis, a first end, a
2 second end, an outer surface with a plurality of circumferential grooves, located between
3 said first and said second ends, for affixedly receiving a generally cylindrical shell, and a
4 bore extending from said first end to said second end;

5 wherein said plurality of circumferential grooves are dimensioned for
6 affixedly receiving at least one of an inside surface, an end surface and an outside surface

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7 of said generally cylindrical shell; and

8 said plurality of grooves comprising:

9 a first groove with a generally flat base portion parallel with said
10 longitudinal axis, a first generally vertically oriented side wall, and a second generally
11 vertically oriented side wall having a maximum radial extent less than said first side wall;

12 a second groove adjacent said first groove, with a generally flat base
13 portion parallel with said longitudinal axis having a diameter less than said first groove
14 base portion, a first generally vertically oriented side wall having a maximum radial
15 extent substantially equal to said first groove second side wall, and a second generally
16 vertically oriented side wall having a maximum radial extent less than said second groove
17 first side wall; and

18 a third groove adjacent said second groove, with a generally flat base
19 portion parallel with said longitudinal axis having a diameter less than said second
20 groove base portion, a first generally vertically oriented side wall having a maximum
21 radial extent substantially equal to said second groove second side wall and a second
22 generally vertically oriented side wall having a maximum radial extent greater than said
23 third groove first side wall.

1 28. (Original) The generally tubular nipple as in claim 27 further including an insert
2 portion located between said third groove and said second end and has a plurality of
3 spaced, circumferentially extending, frusto-conically shaped protrusions on the outer
4 surface thereof.

1 29. (Original) The generally tubular nipple as in claim 27 wherein one of said
2 plurality of spaced protrusions is positioned approximately equidistant between said third
3 groove and said second end and has a maximum radial extent greater than that of each of
4 the others of said plurality of protrusions.

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1 30. (Original) The generally tubular nipple as in claim 27 wherein said generally flat
2 base portion of each of said plurality of circumferential grooves has a series of surface
3 disruptions along its circumference.

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1 31. (Original) The generally tubular nipple as in claim 27 wherein the outer surface
2 of said third groove second substantially vertically oriented side wall has threads for
3 attachment with said generally cylindrical shell.

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1 32. (Original) A generally tubular nipple having a longitudinal axis, a first end, a
2 second end, an outer surface with at least two circumferential grooves located between
3 said first and said second ends for affixedly receiving a generally cylindrical shell, and a
4 bore extending from said first end to said second end;

5 wherein said at least two circumferential grooves are dimensioned for
6 affixedly receiving at least one of an inside surface, an end surface and an outside surface
7 of said generally cylindrical shell; and

8 said at least two circumferential grooves comprising:

9 a first groove with a generally flat base portion parallel with said
10 longitudinal axis, a first generally vertically oriented side wall, and a second generally
11 vertically oriented side wall having a maximum radial extent less than said first side wall;
12 and

13 second groove adjacent said first groove, with a generally flat base
14 portion parallel with said longitudinal axis having a diameter less than said first groove
15 base portion, a first generally oriented side wall having a maximum radial extent
16 generally equal to said first groove second side wall, and a second generally vertically
17 oriented side wall having a maximum radial extent greater than said second groove first
18 side wall.

1 33. (Original) The generally tubular nipple as in claim 32 further including an insert
2 portion located between said second groove and said second end and has a plurality of

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3 spaced, circumferentially extending, frusto-conically shaped protrusions on the outer
4 surface thereof.

1 34. (Original) The generally tubular nipple as in claim 33 wherein one of said
2 plurality of spaced protrusions is positioned approximately equidistant between said
3 second groove and said second end and has a maximum radial extent greater than that of
4 each of the others of said plurality of protrusions.

1 35. (Original) The generally tubular nipple as in claim 32 wherein said generally flat
2 base portion of each of said at least two circumferential grooves has a series of surface
3 disruptions along its circumference.

1 36. (Original) The generally tubular nipple as in claim 32 wherein the outer surface
2 of said second groove second substantially vertically oriented side wall has threads for
3 attachment with said generally cylindrical shell.

1 37. (Original) A generally tubular nipple having a longitudinal axis, a first end, a
2 second end, an outer surface with a series of circumferential grooves located between
3 said first and said second ends for affixedly receiving a generally cylindrical shell, and a
4 bore extending from said first end to said second end;

5 wherein said series of circumferential grooves are dimensioned for
6 affixedly receiving at least one of an inside surface, an end surface and an outside surface
7 of said generally cylindrical shell; and

8 said series of grooves comprising:

9 a first groove with a generally flat base portion parallel with said
10 longitudinal axis, a first substantially radially directed side wall, and a second
11 substantially radially directed side wall;

12 a second groove adjacent said first groove, with a generally flat base
13 portion parallel with said longitudinal axis having a diameter less than said first groove

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14 base portion, a first substantially radially directed side wall, having a maximum radial
15 extent generally equal to said first groove second side wall, and a second substantially
16 radially directed side all; and

17 a third groove adjacent said second groove, with a generally flat base
18 portion parallel with said longitudinal axis having a diameter less than said second
19 groove base portion, a first substantially radially directed side wall, having a maximum
20 radial extent generally equal to said second groove second side wall, and a second
21 substantially radially directed side wall.

1 38. (Original) The generally tubular nipple as in claim 37 wherein said first
2 groove second side wall and said second groove second side wall have a contoured top
3 portion.

1 39. (Original) The generally tubular nipple as in claim 37 wherein said first groove
2 second side wall and said second groove second side wall have an angled top portion.

1 40. (Original) The generally tubular nipple as in claim 37 further including an insert
2 portion located between said third groove and said second end and has a plurality of
3 spaced, circumferentially extending, frusto-conically shaped protrusions on the outer
4 surface thereof.

1 41. (Original) The generally tubular nipple as in claim 40 wherein one of said
2 plurality of spaced protrusions is positioned approximately equidistant between said third
3 groove and said second end and has a maximum radial extent greater than that of each of
4 the others of said plurality of protrusions.

1 42. (Original) The generally tubular nipple as in claim 37 wherein said generally flat
2 base portion of each of said series of circumferential grooves has a series of surface
3 disruptions along its circumference.

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1 43. (Currently Amended) [[The]] A generally tubular nipple as in claim 37 wherein
2 ~~the outer surface of said third groove second substantially vertically oriented side wall~~
3 has a series of threads for attachment with said generally cylindrical shell having a
4 longitudinal axis, a first end, a second end, an outer surface with a series of
5 circumferential grooves located between said first and second ends for affixedly
6 receiving a generally cylindrical shell, and a bore extending from said first end to said
7 second end;

8 wherein said series of circumferential grooves are dimensioned for
9 affixedly receiving at least one of an inside surface, an end surface and an outside surface
10 of said generally cylindrical shell; and

11 said series of grooves comprising:
12 a first groove with a generally flat base portion parallel with said
13 longitudinal axis, a first substantially radially directed sidewall, and a second
14 substantially radially directed sidewall;

15 a second groove adjacent said first groove, with a generally flat base
16 portion parallel with said longitudinal axis having a diameter less than said first groove
17 base portion, a first substantially radially directed sidewall, having a maximum radial
18 extent generally equal to said first groove second sidewall, and a second substantially
19 radially directed sidewall; and

20 a third groove adjacent said second groove, with a generally flat base
21 portion parallel with said longitudinal axis having a diameter less than said second
22 groove base portion, a first substantially radially directed sidewall, having a maximum
23 radial extent generally equal to said second groove second sidewall, and a second
24 substantially radially directed sidewall having an outer surface with a series of threads for
25 attachment with said generally cylindrical shell.

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